

WHAT IS CLAIMED IS:

1. An image forming apparatus comprising:

first and second side frames as a pair of left and
right frames extending in a substantially vertical
5 direction;

an image forming unit disposed between the first and
second side frames for developing an electrostatic latent
image formed on an electrostatic latent image support,
transferring the latent image to a recording medium, and
10 forming an image on the recording medium;

an exposure unit disposed above the image forming unit
for exposing the electrostatic latent image support to
light for forming an electrostatic latent image;

a main control board placed substantially vertically
15 on the side of the first side frame for outputting a light
exposure signal to the exposure unit in accordance with
image data and outputting control signals to the image
forming unit and the exposure unit;

a power board placed substantially horizontally below
20 the image forming unit on the side of the second side
frame; and

an engine control board placed substantially
horizontally below the image forming unit for outputting a
drive signal to drive sources of the image forming unit and
25 the exposure unit in accordance with a control signal from

the main control board, the engine control board placed closer to the first side frame than the power board.

2. The image forming apparatus as claimed in claim 1, further comprising an operation panel placed above the
5 image forming unit and connected to the main control board.

3. The image forming apparatus as claimed in claim 1, wherein the power board comprises:

a low voltage power board being connectable to a commercial power supply to output a predetermined voltage;
10 and

a high voltage power board for applying various biases to the image forming unit.

4. The image forming apparatus as claimed in claim 3, wherein the image forming unit comprises a process
15 cartridge detachably disposed between the first and second side frames,

a cartridge side contact to which a bias is applied is provided on a second side frame side of the process cartridge, and

20 a body side contact connected to the cartridge side contact and connected to the high voltage power board is provided on a second side frame side of an apparatus body.

5. The image forming apparatus as claimed in claim 3, wherein a fixing unit for thermally fixing an image
25 transferred to a recording medium is placed downstream in a

recording medium transport direction from the image forming unit, and the high voltage power board is placed upstream in the recording medium transport direction from the low voltage power board.

5 6. The image forming apparatus as claimed in claim 5, wherein the low voltage power board supplies power to a heater disposed in the fixing unit.

7. The image forming apparatus as claimed in claim 5, further comprising a front cover provided at a front side
10 of the image forming apparatus,

wherein the high voltage power board is placed at the front side in the image forming apparatus,

the low voltage power board is placed at a rear side opposite to the front side in the image forming apparatus,
15 and

the process cartridge is attached to and detached from the image forming apparatus through the front side of the image forming apparatus when the front cover is open.

8. The image forming apparatus as claimed in claim 7,
20 wherein a space is defined behind the low voltage power board and a part of a return path for guiding a recording medium with an image formed on one side from the upper side of the low voltage power board to the lower side and returning the recording medium to the image forming unit is
25 formed in the space.

9. The image forming apparatus as claimed in claim 1,
wherein a sheet feed tray on which recording mediums are
stacked is detachably placed through a front side of the
image forming apparatus, and the sheet feed tray is placed
5 below the power board and the main control board.

10. The image forming apparatus as claimed in claim 1,
further comprising a reader placed on the top of the image
forming apparatus and connected to the main control board.